

NATURAL HISTORY MISCELLANEA

Published by

The Chicago Academy of Sciences

Lincoln Park-2001 N. Clark St., Chicago 14, Illinois, U.S.A.

No. 172

October 30, 1959

A List and Bibliography of the Fossil Mammals of Illinois

ROBERT S. BADER¹ AND DAVID TECHTER²

It is hoped that the list and bibliography presented here will be of value to both paleontologists and mammalogists, particularly those engaged in faunal comparisons of widely separate areas of the continent. Since there are no vertebrate-bearing deposits of Mesozoic or Tertiary age within the state, the fossil mammalian fauna is restricted wholly to the Pleistocene. Although Illinois is not generally considered to be among the more prolific regions of the country with respect to fossil mammals, 42 species (43% of which are extinct) and approximately 100 references are included in the present study.

The list of names proposed during the past century has been modified and revised to conform as closely as possible to current taxonomic thinking about the several groups. No attempt has been made to include strictly archaeological studies although some of the references listed below (e.g., Galbreath, 1938) may include Recent material.

The authors would like to acknowledge their indebtedness to Miss Mildred Donohue, Ohio State University, for her assistance in the study. The work was supported in part by National Science Foundation grant no. G-6262 to the senior author.

LIST OF THE FOSSIL MAMMALS

INSECTIVORA

Soricidae

Blarina brevicauda (Say)

PRIMATES

Hominidae

Homo sapiens Linnaeus

EDENTATA

Megalonychidae

Megalonyx jeffersonii (Desmarest)

¹Department of Zoology, Univ. of Illinois, Urbana. ²
Chicago Natural History Museum, Chicago, Ill.

LAGOMORPHA

Leporidae

Sylvilagus floridanus (J. A. Allen)

RODENTIA

Sciuridae

Marmota monax (Linnaeus)

Geomyidae

Geomys bursaries (Shaw)

Castoridae

Castor canadensis Kuhl

Castoroides ohioensis Foster

Cricetidae

Ondatra zibethicus (Linnaeus)

Microtus sp.

CARNIVORA

Canidae

Canis familiaris Linnaeus

Canis latrans Say

Canis lupus Linnaeus

Canis mississippiensis J. A. Allen

Urocyon cinereoargenteus (Schreber)

Ursidae

Ursus americanus Pallas

Ursus cf. *. horribilis* Ord

Procyonidae

Procyon lotor (Linnaeus) *Procyon* sp.

priscus Le Conte ?

Felidae

Felis concolor Linnaeus

Lynx sp.

PROBOSCIDEA

Mammutidae

Mammut americanum (Kerr)

Elephantidae

Mammuthus primigenius (Blumenbach)

Mammuthus jeffersoni (Osborn)

PERISSODACTYLA

Equidae

Equus corn plicatus Leidy

Equus sp.

ARTIODACTYLA

Tayassuidae

Platygonus compressus Le Conte

Platygonus sp. *cumberlandensis* Gidley?

Cervidae

Odocoileus virginianus (Zimmermann)*Odocoileus fugitiva* (Hay)*Cervus canadensis* Erxleben*Cervus whitneyi* J. A. Allen*Cervalces roosevelti* Hay*Rangifer er* sp. *muscatinensis* Leidy?*Alces alces* (Linnaeus)

Antilocapridae

Antilocapra americana (Ord)

Bovidae

Bison bison Linnaeus*Bison* sp.*Symbos cavifrons* Leidy*Symbos* sp. *promptus* Hay?*Euceratherium* (?) *americanum* (Gidley)*Ovibos* sp.*Ovis* sp.

BIBLIOGRAPHY

- Adams, L. A., 1923. The shifting of the mammalian faunas as shown by the Pleistocene remains of Illinois. Trans. Illinois Acad. Sci., 16: 140-144.
- Allen, J. A., 1876a. Description of some remains of an extinct species of wolf and an extinct species of deer from the lead region of the Upper Mississippi. American Jour. Sci., 11: 47-51.
- 1876b. The American bisons, living and extinct. Mem. Mus. Comp. Zool., 4: 1-246.
- Anderson, F., 1937. Discovery of a mastodon skeleton near Aurora, Illinois. Rocks and Minerals, 12: 342.
- Anderson, N. C., 1905. A preliminary list of fossil mastodon and mammoth remains in Illinois and Iowa. Augustana Lib. Publ., no. 5: 1-43.
- Anon., 1934. Nouvelle acquisition du Musée d'Histoire Naturelle de L'Université d'Illinois (Etas-Unis) . Mus. Sci. Soc. Nation., nos. 17-18: 243-244.
- 1935. Fouilles a Phillip's Park, Aurora, Sud-Est-Illinois. *ibid.*, no. 26: 509-512.
- Bagg, R. M., 1909. Notes on the distribution of the mastodon in Illinois. Bull. Univ. Illinois, 6: 47-56.
- Baker, F. C., 1920a. Animal life in loess deposits near Alton, Illinois, with descriptions of two new varieties of land shells from the same deposit. Nautilus, 34: 61-66.

- _____ 1920b. The life of the Pleistocene, or Glacial, period. Bull. Univ. Illinois, 17: 1-476.
- _____ 1930. A new record of *Castoroides ohioensis* from Illinois. Science (n.s.), 71: 389.
- _____ 1934. A new mammoth record from Illinois. *ibid.*, 80: 118.
- Bannister, H. M., 1870. Geology of DeKalb, Kane, and DuPage Counties (Illinois). Illinois Geol. Surv., 4: 111-125.
- Blatchley, W. S., 1898. The geology of Lake and Porter Counties, Indiana. Ann. Rept. Dept. Geol. Nat. Res., 22: 25-104.
- Bradley, F. H., 1870a. Geology of Grundy County [Illinois]. Illinois Geol. Surv., 4: 190-206.
- _____ 1870b. Geology of Vermillion County [Illinois]. *ibid.*, 4: 241-265.
- _____ 1870c. Geology of Champaign, Edgar, and Ford Counties [Illinois]. *ibid.*, 4: 266-275.
- Broadhead, G. C., 1870a. Bones of large mammals in drift. Trans. St. Louis Acad. Sci., 3: xxii-xxiii.
- _____ 1870b. Quaternary deposits. American Nat., 4: 61-62.
- _____ 1875. Geology of Moultrie, Macon, and Piatt Counties [Illinois]. Illinois Geol. Surv., 6: 185-196.
- _____ 1881. The mastodon. Kansas City Review of Science and Industry, 4: 519-530.
- Cahn, A. R., 1929. Information concerning *Castoroides*. Science (n.s.), 70: 635.
- _____ 1930. Auditory ossicles of living and giant beavers. Jour. Mamm., 11: 292-299.
- _____ 1932. Records and distribution of the fossil beaver, *Castoroides ohioensis*. *ibid.*, 13: 229-241.
- _____ 1936. Further notes on the giant beaver. *ibid.*, 17: 66-67.
- Caton, J. D., 1881. The antelope and deer of North America. 426 pp. Houghton, Mifflin and Co., Boston.
- Clarke, J. M. 1904. Report of the state paleontologist of New York. Ann. Rept. N. Y. State Mus., 56: 926.
- Collett, J., 1881. The mammoth and the mastodon. Indiana Geol. Surv., Rept. Bur. Stat. Geol., 2: 16-18.
- Cope, E. D., 1869. Synopsis of extinct mammalia of the cave formations in the United States, with observations on some Myriapoda found in and near the same, and on some extinct mammals of the caves of Anguilla, W. I., and of other localities. Proc. American Phil. Soc., 11: 171-192.
- _____ 1882. Recent extinction of the mastodon. American Nat., 16: 74-75.

- Cox, E. T., 1875. Geology of Gallatin County [Illinois]. Illinois Geol. Surv., 6: 197-219.
- Crook, A. R., 1926. *Elephas primigenius boreus* Hay at Golconda, Illinois. Trans. Illinois Acad. Sci., 19: 288-299.
- _____. 1927a. *Elephas primigenius boreus* Hay in Illinois. Bull. Geol. Soc. America. 28: 137-138 (Abstract).
- _____. 1927b. Elephant hunting in Illinois. Scient. American, Jan., 1927: 24.
- Farrington, O. C., 1901. The mastodon in Chicago. Chicago Sunday Times-Herald, Jan. 6, 1901.
- Foster, J. W., 1857. On the geological position of the deposits in which occur the remains of the fossil elephant of North America. Proc. American Assoc. Adv. Sci., 10: 148-169.
- Frick, C., 1937. Horned ruminants of North America. Bull. American Mus. Nat. Hist., 69: i-xxviii, 1-669.
- _____. Fryxell, F. M., 1926. A horn of the prong-horn antelope (*Antilocapra americana*) found at Moline, Illinois. Jour. Mamm., 7: 333-334.
- Galbreath, E. C., 1938. Post-glacial fossil vertebrates from East Central Illinois. Field Mus. Nat. Hist., Geol. Ser., 6: 303-313.
- _____. 1939. A second record of *Cervalces* from East-Central Illinois. Jour. Mamm., 20: 507-508.
- _____. 1946. *Equus* from the Pleistocene of Illinois. *ibid.*, 27: 91-92.
- _____. 1947. Additions to the flora of the Late Pleistocene deposits of Ashmore, Illinois. Trans. Kansas Acad. Sci., 50: 60-61.
- Gazin, C. L., 1933. The status of the extinct american "eland". Jour. Mamm., 14: 162-164.
- Gidley, J. W., 1901. Tooth characters and revision of the North American species of the genus *Equus*. Bull. American Mus. Nat. Hist., 14: 91-142.
- Hay, O. P., 1912. The Pleistocene period [in Indiana] and its vertebrata. Indiana Geol. Surv., 36: 538-784.
- _____. 1914. The Pleistocene mammals of Iowa. Iowa Geol. Surv., 23: 1-662.
- _____. 1921. Descriptions of some Pleistocene vertebrates found in the United States. Proc. U. S. Nat. Mus., 58: 83-146.
- _____. 1922. Further observations on some extinct elephants. Proc. Biol. Soc. Washington, 35: 97-102.
- _____. 1923. The Pleistocene in North America and its vertebrated animals from the states east of the Mississippi River and from the Canadian provinces east of longitude 95°. Publ. Carnegie Inst. Washington, No. 322: 1-499.

- _____. 1925. A further and detailed description of the type of *Elephas roosevelti* and descriptions of three referred specimens. Proc. U. S. Nat. Mus., 66: 1-6.
- _____. 1927a. The prong-horn antelope in Illinois. Jour. Mamm., 8: 61-62.
- _____. 1927b. Appendix, 276-277, in *The Pleistocene of the Western Region of North America and its Vertebrated Animals*. Publ. Carnegie Inst. Washington, No. 322B, 1-346.
- Hayden, F. V., 1866. [Discovery of a mastodon tooth near Fort Kearney and another opposite St. Louis.] Proc. Acad. Nat. Sci. Philadelphia, 18: 316.
- Higley, W. K., and C. S. Raddin, 1891. The flora of Cook County, Illinois, and a part of Lake County, Indiana. Bull. Chicago Acad. Sci., 2: III-XXIII, 1-166.
- Lathrop, S. P., 1851. Mastodon in northern Illinois. American Jour. Sci., series 2, 12: 439.
- LeConte, J. L., 1848a. On *Platygonus compressus*; a new pachyderm fossil. Mem. American Acad. Arts. Sci., 3: 257-274.
- _____. 1848b. Notice of five new species of fossil mammalia from Illinois. American Jour. Sci., series 2, 5: 102-106.
- _____. 1852a. Notes on some fossil suiline pachyderms from Illinois. Proc. Acad. Nat. Sci. Philadelphia, 6: 3-5; 56-57.
- _____. 1852b. [Remarks on *Castoroides ohioensis* from Shawneetown, Illinois.] *ibid.*, 6: 53.
- Leidy, J., 1853. A memoir on the extinct Dicotylinae of America. Trans. American Phil. Soc., 10: 323-343.
- _____. 1856. Descriptions of some remains of extinct mammalia. Jour. Acad. Nat. Sci. Philadelphia, series 2, 3: 166-171.
- _____. 1862. Observations upon the mammalian remains found in the crevices of the lead-bearing rocks at Galena, Illinois. Rept. Geol. Surv. Wisconsin, 1: 424.
- _____. 1867. [Remarks on a skull of *Castoroides ohioensis* found near Charleston, Illinois.] Proc. Acad. Nat. Sci. Philadelphia, 19: 97-98.
- _____. 1869. The extinct mammalian fauna of Dakota and Nebraska, including an account of some allied forms from other localities, together with a synopsis of the mammalian remains of North America. Jour. Acad. Nat. Sci. Philadelphia series 2, 7: 1-472.
- _____. 1870. [Remarks on ichthyodorulites and on certain fossil mammalia.] Proc. Acad. Nat. Sci. Philadelphia 22: 12-13.
- _____. 1873. Contribution to the extinct vertebrate fauna of the Western Territories. Rept. U. S. Geol. Surv. Terr., 1: 14-358.

- _____. 1888. On a fossil of the Ruma. Proc. Acad. Nat. Sci. Philadelphia, 40: 9-10.
- _____. 1889a. Notice of some mammalian remains from the salt mine of Petite Anse, Louisiana. Trans. Wagner Free Inst. Sci., 2: 33-40.
- _____. 1889b. Notice and description of fossils in caves and crevices of limestone rocks of Pennsylvania. Ann. Rept. Geol. Surv. Pennsylvania for 1887: 1-20.
- Leighton, M. M., 1921. The Pleistocene succession near Alton, Illinois and the age of the mammalian fossil fauna. Jour. Geol., 29: 505-514.
- Leverett, F., 1889. Raised beaches of Lake Michigan. Trans. Wisconsin Acad. Sci., 7: 177-192.
- _____. 1897. The Pleistocene features and deposits of the Chicago area. Chicago Acad. Sci., Bull. Geol. Nat. Hist. Surv., 2: 1-86.
- Mackie, S. J., 1863. A classified and stratigraphical list of fossil mammalia. The Geologist, 6: 332-347.
- McAdams, W., 1882. Collections of fossils from the drift of the valleys of the Illinois and Mississippi Rivers. Trans. St. Louis Acad. Sci., 4: LXXIX-LXXXI.
- _____. 1883. Animal remains from the loess and glacial clays. Proc. American Assoc. Adv. Sci., 32: 268-269.
- Miller, G. S., Jr., and R. Kellogg, 1955. List of North American recent mammals. Bull. U. S. Nat. Mus., 205: 1-954.
- Powers, W. E., 1935. Geological setting of the Aurora mastodon remains. Trans. Illinois Acad. Sci., 28: 193-194.
- _____. 1936a. Occurrence of the extinct moose, *Cervalces*, in Indiana and in Illinois. American Mid. Nat., 17: 664.
- _____. 1936b. A Pleistocene bog deposit and its fossil fauna. Trans. Illinois Acad. Sci., 29: 186-189.
- Savage, D. E., 1951. Late Cenozoic vertebrates of the San Francisco Bay region. Publ. Univ. California, Geol. Sci., 28: 215-314.
- Savage, T. E., and J. A. Udden 1922. The geology and mineral resources of the Edgington and Milan quadrangles. Bull. Illinois Geol. Surv., 38: 115-208.
- Shaw, J., 1873. Geology of Ogle County [Illinois]. Illinois Geol. Surv., 5: 104-123.
- Simpson, G. G., 1945. The principles of classification and a classification of mammals. Bull. American Mus. Nat. Hist., 85: 1-350.
- _____. Skinner, M. J., and O. C. Kaisen, 1947. The fossil bison of Alaska and preliminary revision of the genus. Bull. American Mus. Nat. Hist., 89: 127-256.

- No. 172 *The Chicago Academy of Sciences, Natural History Miscellanea*
- Smith, C. R., 1935a. Mastodon and other finds at Aurora. Trans. Illinois Acad. Sci., 28: 195-196.
- _____ 1935b. Mastodon and other remains at Aurora, Illinois. Science (n. s.), 81: 379-380.
- _____ 1939. Summary of mastodon and other finds in the area of Aurora, Illinois. Bull. Geol. Soc. America, 50: 2010 (Abstract).
- Udden, J. A., 1905. On the proboscidean fossils of the Pleistocene deposits in Illinois and Iowa. Augustana Lib. Publ., No. 5: 45-47.
- _____ 1912. Geology and mineral resources of the Peoria Quadrangle, Illinois. Bull. U. S. Geol. Surv., 506: 7-99.
- Warren, J. C., 1853. Remarks on *Mastodon giganteus* and *Elephas primigenius*. Proc. Boston Soc. Nat. Hist., 4: 376-377.
- _____ 1855. The *Mastodon giganteus* of North America. 2nd Ed., 260 pp. Wilson and Sons, Boston.
- Whitney, J. D., 1862. Report of a geological survey of the Upper Mississippi lead region. Rept. Geol. Surv. Wisconsin, 1: 73-420.
- _____ 1866. Geology of the lead region. Illinois Geol. Surv., 1: 153-207.
- Whittlesey, C., 1866. On the fresh water glacial drift of the north western states. Smithsonian Contrib. Knowl., 15: 1-32.
- Wilbur, C. D., 1861. *Mastodon giganteus*. Trans. Illinois Nat. Hist. Soc., series 1, 1: 59-64.
- Willman, H. B., 1951. Mammoth found in Peorian loess near Bellview, Illinois. American Jour. Sci., 239: 413-416. (Reprinted in Circ. Illinois Geol. Surv., 66: 1-4).
- Winchell, N. H., 1905. Review of papers by Netta C. Anderson and Johann A. Udden. American Geol., 36: 258-261.
- Worthen, A. H., 1866a. Physical features, general principles, and surface geology. Illinois Geol. Surv., 1: 1-39.
- _____ 1866b. Geology of Madison County [Illinois] . *ibid.*, 1: 313-326.
- _____ 1871. [Vertical range of the mammoth and mastodon.] American Nat., 5: 606-607.
- _____ 1873a. Geology of Peoria County [Illinois]. Illinois Geol. Surv., 5: 235-252.
- _____ 1873b. Geology of Sangamon County [Illinois] . *ibid.*, 5: 306-319.
- _____ 1890. Drift deposits of Illinois. *ibid.*, 8: 1-24.
- Wyman, J., 1862. Observations upon the remains of extinct and existing species of mammalia found in the crevices of the lead-bearing rocks and in the superficial accumulations within the lead region of Wisconsin, Iowa, and Illinois. Rept. Geol. Surv. Wisconsin, 1: 421-423.